Application No.: 10/583,351

Attorney Docket No.: 062677

Amendment under 37 CFR §1.111

AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

1. (Currently Amended): A process for preparing a vinyl chloride copolymer resin by

copolymerizing a vinyl chloride type monomer and a macromonomer having a polymer

comprising an ethylenically unsaturated monomer containing a double bond in a main chain,

wherein the vinyl chloride type monomer and the macromonomer having a polymer comprising

an ethylenically unsaturated monomer containing a double bond in a main chain are previously

dispersed and mixed at a temperature from 20°C to 60°C for at least 1 minute so as to obtain a

mixture solution, and [[then]] copolymerization reaction of the mixture solution [[thereof]] is

carried out initiated.

2. (Original): The process for preparing a vinyl chloride copolymer resin of Claim 1,

wherein the vinyl chloride type monomer and the macromonomer having a polymer comprising

an ethylenically unsaturated monomer containing a double bond in a main chain are totally put

into a dispersing-and-mixing tank, and then dispersed and mixed.

3. (Currently Amended): The process for preparing a vinyl chloride copolymer resin of

Claim 1 [[or 2]], wherein the ratio of the vinyl chloride type monomer to the total amount of the

monomer components constituting the vinyl chloride copolymer resin is at least 50 % by weight

up to less than 100 % by weight.

- 2 -

Application No.: 10/583,351

Attorney Docket No.: 062677

Amendment under 37 CFR §1.111

4. (Currently Amended): The process for preparing a vinyl chloride copolymer resin of

Claim 1 [[or 2]], wherein the ratio of (A) the vinyl chloride type monomer to (B) the

macromonomer having a polymer comprising an ethylenically unsaturated monomer containing

a double bond in a main chain (A/B) is 99.95 % by weight/0.05 % by weight to 60 % by

weight/40 % by weight.

5. (Currently Amended): The process for preparing a vinyl chloride copolymer resin of

Claim 1 [[or 2]], wherein the vinyl chloride type monomer and the macromonomer having a

polymer comprising an ethylenically unsaturated monomer containing a double bond in a main

chain are copolymerized in an aqueous medium.

6. (Currently Amended): The process for preparing a vinyl chloride copolymer resin of

Claim 1 [[or 2]], wherein the vinyl chloride type monomer and the macromonomer having a

polymer comprising an ethylenically unsaturated monomer containing a double bond in a main

chain are prepared by at least one process selected from the group consisting of emulsion

polymerization, suspension polymerization and micro suspension polymerization.

7. (Currently Amended): The process for preparing a vinyl chloride copolymer resin of

Claim 1 [[or 2]], wherein the macromonomer having a polymer comprising an ethylenically

unsaturated monomer containing a double bond in a main chain has a polymerizable reactive

group, and said polymerizable reactive group has a structure containing at least one group

represented by the following general formula per one molecule:

- 3 -

Application No.: 10/583,351 Attorney Docket No.: 062677 Amendment under 37 CFR §1.111

$$-OC(O)C(R)=CH_2$$
 (1)

wherein R represents a hydrogen atom or an organic group having 1 to 20 carbon atoms.

- 8. (Currently Amended): The process for preparing a vinyl chloride copolymer resin of Claim 1 [[or 2]], wherein the macromonomer having a polymer comprising an ethylenically unsaturated monomer containing a double bond in a main chain is prepared by living radical polymerization.
- 9. (Currently Amended): The process for preparing a vinyl chloride copolymer resin of Claim 1 [[or 2]], wherein at least one of the macromonomers having a polymer comprising an ethylenically unsaturated monomer containing a double bond in a main chain has a glass transition temperature of at most 0°C.
- 10. (Currently Amended): A vinyl chloride copolymer resin eomposition which contains the vinyl chloride copolymer resin obtained by the process of Claim 1 or 2 obtained by copolymerizing a vinyl chloride type monomer and a macromonomer having a polymer comprising an ethylenically unsaturated monomer containing a double bond in a main chain, wherein the macromonomer has a number average molecular weight ranging from 500 to 100,000 and a ratio of weight average molecular weight (Mw) to number average molecular weight (Mn) (Mw/Mn) of smaller than 1.8.

Application No.: 10/583,351

Attorney Docket No.: 062677

Amendment under 37 CFR §1.111

11. (New): The vinyl chloride copolymer resin of Claim 10, wherein the ratio of the

vinyl chloride type monomer to the total amount of the monomer components constituting the

vinyl chloride copolymer resin is at least 50 % by weight up to less than 100 % by weight.

12. (New): The vinyl chloride copolymer resin of Claim 10, wherein the ratio of (A) the

vinyl chloride type monomer to (B) the macromonomer having a polymer comprising an

ethylenically unsaturated monomer containing a double bond in a main chain (A/B) is 99.95 %

by weight/0.05 % by weight to 60 % by weight/40 % by weight.

13. (New): The vinyl chloride copolymer resin of Claim 10, wherein the vinyl chloride

type monomer and the macromonomer having a polymer comprising an ethylenically

unsaturated monomer containing a double bond in a main chain are copolymerized in an aqueous

medium.

14. (New): The vinyl chloride copolymer resin of Claim 10, wherein the vinyl chloride

type monomer and the macromonomer having a polymer comprising an ethylenically

unsaturated monomer containing a double bond in a main chain are prepared by at least one

process selected from the group consisting of emulsion polymerization, suspension

polymerization and micro suspension polymerization.

15. (New): The vinyl chloride copolymer resin of Claim 10, wherein the macromonomer

having a polymer comprising an ethylenically unsaturated monomer containing a double bond in

- 5 -

Application No.: 10/583,351 Attorney Docket No.: 062677 Amendment under 37 CFR §1.111

a main chain has a polymerizable reactive group, and said polymerizable reactive group has a structure containing at least one group represented by the following general formula per one molecule:

$$-OC(O)C(R)=CH_2$$
 (1)

wherein R represents a hydrogen atom or an organic group having 1 to 20 carbon atoms.

- 16. (New): The vinyl chloride copolymer resin of Claim 10, wherein the macromonomer having a polymer comprising an ethylenically unsaturated monomer containing a double bond in a main chain is prepared by living radical polymerization.
- 17. (New): The vinyl chloride copolymer resin of Claim 10, wherein at least one of the macromonomers having a polymer comprising an ethylenically unsaturated monomer containing a double bond in a main chain has a glass transition temperature of at most 0°C.
- 18. (New): The process for preparing a vinyl chloride copolymer resin of Claim 1, wherein the macromonomer has a number average molecular weight ranging from 500 to 100,000.
- 19. (New): The process for preparing a vinyl chloride copolymer resin of Claim 1, wherein the macromonomer has a ratio of weight average molecular weight (Mw) to number average molecular weight (Mn) (Mw/Mn) of small than 1.8.